Special Issue

INS/GNSS Integration Techniques for Autonomous Navigation Systems

Message from the Guest Editors

This Special Issue aims to explore cutting-edge research on the integration technologies of INS (Inertial Navigation Systems) and GNSS (Global Navigation Satellite Systems) in autonomous navigation systems. As the application of autonomous systems such as self-driving vehicles and drones becomes increasingly widespread in complex environments, enhancing the accuracy and robustness of navigation systems has become particularly important. The integration of INS and GNSS can overcome the limitations of individual systems, providing reliable navigation support in harsh conditions, which is a significant research direction in the fields of electronic engineering and electronic technology. In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

- INS/GNSS loosely, tightly, and deep-tightly integrated algorithms;
- GNSS anti-jamming technologies based on multi-sensor fusion;
- Multi-sensor-integrated navigation based on Kalman filtering or factor graph optimization;
- Post-processing applications for navigation and positioning data.

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About the Journal

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).